

## Abstract of the Disclosure

The present invention relates to a method and a circuit arrangement for evaluating phase signals for determining an angle or a path of a linearly or rotationally displaced component, whereby a number (N) of measured phase values ( $\alpha$ ), produced by scanning at least one phase sensor arrangement on the linearly or rotatably displaced component by means of an assigned sensor, are evaluated. According to the invention, once the measured phase values ( $\alpha$ ) have been transformed with a matrix ( $\underline{M}_1$ ), a quality level (R) is determined by producing a vector ( $\underline{T}$ ) followed by the result of a quantization operation ( $\underline{V}$ ) regarding the vector ( $\underline{T}$ ). Once a transformation has been carried out with a further matrix ( $\underline{M}_4$ ), a further vector ( $\underline{X}$ ) is produced from the difference ( $\underline{t}$ ) between the vector ( $\underline{T}$ ) and the result of the quantization operation ( $\underline{V}$ ), coefficients ( $C_j$ ) and ( $D_j$ ) being applied to the components ( $x_j$ ) of said other vector, and the quality level (R) is derived therefrom.

(Figure 1)